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WHAT IS CLAIMED IS:

1. An electrolyte composition comprising: a molten salt represented by any of the following general formulae (1), (2) and (3); a polymer prepared by a reaction between an electrophile having at least two unsaturated bonds polarized by an electron-withdrawing group and a nucleophile having a plurality of nucleophilic groups; and a metal salt containing a Group IA metal ion or a Group IIA metal ion.

$$\begin{pmatrix}
Q_{y1} \\
N^{+} \\
R_{y1}
\end{pmatrix} X^{-} \dots (1)$$

$$R_{y5} \xrightarrow{R_{y2}} R_{y3} \xrightarrow{+} R_{y3} \qquad x^{-} \qquad (2)$$

$$R_{y6}$$
 R_{y7} R_{y11} R_{y8} X^{-} ... (3)

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In the general formulae (1), (2) and (3), Q_{y1} represents an atomic group forming an aromatic cation having a 5- or 6-membered ring structure with the nitrogen atom, A_{y1} represents a nitrogen atom or a phosphorus atom, R_{y1} to R_{y11} independently represent a substituted or unsubstituted alkyl group or a substituted or unsubstituted alkenyl group, X^- represents an anion, two or more of R_{y2} to R_{y5} in the general formula (2) optionally bond together to form a non-aromatic ring containing A_{y1} , and two or more of R_{y6} to R_{y11} in the general

formula (3) optionally bond together to form a ring.

- 2. The electrolyte composition according to claim 1, wherein said Q_{y1} is composed of atoms selected from the group consisting of carbon, hydrogen, nitrogen, oxygen and sulfur atoms.
- 5 3. The electrolyte composition according to claim 1, wherein said aromatic cation formed by said Q is an imidazolium cation or a pyridinium cation.
 - 4. The electrolyte composition according to claim 1, wherein said electron-withdrawing group is selected from the group consisting of a sulfonyl group, a cyano group and a carbonyl group.
 - 5. The electrolyte composition according to claim 1, wherein said nucleophilic groups are selected from the group consisting of -NH₂, -SH, -S⁻, -SO₂H and -SO₂⁻.
 - 6. A non-aqueous electrolyte secondary cell comprising the electrolyte composition recited in claim 1.